## A substance derived from pineapple revolutionizes the treatment of burn patients

Zaragoza has become a pioneer in the use of this treatment for the face, thus avoiding skin grafts.

**Inés Escario. Zaragoza** Updated 1/15/2017 at 11:41 **Labels** 



Enrique Monclús, Coordinator of the Major Burns Unit of the Miguel Servet Hospital. Javier Cebollada

**Bromelain**, a substance derived from pineapple stems, **allows us to selectively remove patients' burned skin**, which promotes subsequent regeneration and allows for diagnosis "before and after" the treatment of burn patients.

This is reported by the medical chief of the Major Burns Unit of the Miguel Servet University Hospital of Zaragoza, Enrique Monclús, who says that since May of 2015, he has used this bromelain-based treatment for the debridement of burns, a process that consists of removing

the affected skin that can no longer regenerate itself.

"For the burn patient, it is a spectacular improvement and benefit, in aesthetic terms as well as in the length of hospitalization time, skin quality, decreased blood loss and decline of surgeries for the long-term consequences," says this plastic surgeon. He, together with his colleagues from the other Major Burn Units in Spain, has been a forerunner of this treatment adopting the new technique since its approval in the country in 2015.

Nurses are the real protagonists in the application process. They are responsible for applying the gel on the burns which they then remove four hours later when they subject the patient to a wet dressing treatment and to the removal of the remaining affected skin.

Bromelain is not a healing treatment on its own, the surgeon points out, but rather **it prepares a foundation for healing the burn in other ways**: either by promoting the regeneration of the skin itself or by using skin grafts in the most affected areas where there is no longer any dermis.

In any case, the doctor has highlighted **the decline of grafts for deep burns that have been debrided with bromelain**. This is due to the fact that, before, the patient always needed to undergo surgery. But now, only 20% of these cases require surgery, according to the experience in the <u>Miguel Servet</u> unit.

The **Zaragoza unit was the third in Spain to use this substance** and, since then, **they have treated 30 patients** with this procedure that has become regular in the treatment of severe thermal burns, compared to traditional method of debriding burn victims with a dermatome, a surgical instrument fitted with a knife for removing the burned skin.

For Monclús, this classic procedure, which has been in use for the last 70 years, has a clear disadvantage: when removing the burned skin, healthy skin must also be removed, so you are left with a kind of blank slate.

However, **bromelain is selective:** "it eats what is dead and leaves everything else," something that promotes the regeneration of the skin tissue by itself.

Given the results obtained with this new substance derived from pineapple on the burn patients' skin, Dr. Monclús wondered why not use it on burn victims' faces.

Because, of this, the team at the Miguel Servet Hospital has become a **pioneer in establishing a protocol on the facial use** of bromelain, complemented by the application of a gel made from manuka honey, a healing substance with anti-inflammatory and analgesic properties.

As of today, they have already treated **fifteen patients** and "it is the product's best indication not only since it works well on the face" the surgeon observes, speaking of the **"wonderful" results obtained in patients,** with whom it was not necessary to carry out grafts.

For Monclús, this new technique that they have perfected is "spectacular" because **the face**, **along with the hands, is one of the most difficult areas to debride**, and the traditional

technique with the dermatome caused many aesthetic problems, along with skin grafts, as well as in the areas of the eyes, mouth and nose.

"When doctors do something new that also works, **conferences and journals are our antenna for demonstrating our experiences** so that other colleagues can do the same thing for their patients that we are doing for ours," says the doctor, who has recently contributed to introducing bromelain in Argentina.

Thus, the use of this product derived from pineapple stem and **developed in an Israeli company**, begins to make its way into Latin American countries, which are already in the process of joining those who have approved it, such as Israel and Europe, where **Spain has pioneered its use, along with Germany and Italy.** 

"In less than ten years, it will be the go-to treatment for burns," Monclús predicts, hoping that classic surgical debridement "will become history" and will be reserved for cases such as, for example, old burns in which bromelain may not be as applicable.